



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,273	08/14/2006	Harald Karl Gretsche	W1.2296 PCT-US	5733

7590 03/31/2010
Douglas R Hanscom
Jones Tullar & Cooper
P O Box 2266
Eads Station
Arlington, VA 22202

EXAMINER

ULLAH MASUD, MOHAMMAD R

ART UNIT	PAPER NUMBER
----------	--------------

3687

MAIL DATE	DELIVERY MODE
-----------	---------------

03/31/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,273	Applicant(s) GRETSCH ET AL.	
	Examiner MOHAMMAD R. ULLAH MASUD	Art Unit 3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-70 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 37-70 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. DE102004007459.3.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>08/14/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37 - 70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37 recites providing an implemented logic device, information regarding one of a prognosis of use data for a pending production period to be examined and storage strategy using said data obtained by prognosis, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 37 – 70 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Art Unit: 3687

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

The preamble of these recite a method, however the body of the claims do not positively tie the process steps to said apparatus.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37 -70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Costanza (US 6,594,535), in view of Ohno et al. (US 4,803,634) (hereinafter referred to as Ohno).

With respect to **claim 37**, Costanza discloses a method of materials for use by a material processing machine including:

providing a material flow system (see, for example, abstract);

providing an implemented logic device in said material flow system (see, for example, column 7 lines 48 – 67); (see, for example, column 26 lines 33 -37);

Art Unit: 3687

providing said material flow system with information regarding one of a prognosis of use data for a pending production period to be examined by said material-processing machine and use data derived by prognosis (see, for example, column 4 lines 13-29);

determining, in a first partial process of said material flow system, a storage strategy using said data obtained by prognosis and said actual stock on hand (see, for example, column 4 lines 13 -29);

determining an actual stock on hand in said depot (see, for example, column 21 lines 5 – 28).

Costanza discloses all the above mentioned limitations but does not explicitly teach the limitation for storing unprepared and prepared rolls of material for use by a material-processing machine.

However, Ohno teaches the limitations for storing unprepared and prepared rolls of material for use by a material-processing machine (see, for example, column 25 lines 42 -56 and column 26 lines 28 – 37, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system, for storing unprepared and prepared rolls of material for use by a material-processing machine, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Art Unit: 3687

With respect to **claim 38**, Costanza, discloses a method of considering criteria for a degree of use of storage in said depot in said printing production period to be examined (see, for example, column 4 lines 6 – 29).

With respect to **claim 39**, Costanza, discloses a method further including considering criteria for an intended length of storage time of said material during said production period to be examined (see, for example, column 4 lines 6 – 29), but does not teaches the method wherein it for fresh rolls of material.

However, Ohno teaches the limitations wherein it for fresh rolls of material (see, for example, column 23 lines 13 – 39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system wherein it for fresh rolls of material, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 40**, Costanza, discloses a method further including determining said storage strategy including considering criteria for an intended length of storage time of fresh rolls during said production period to be examined (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 41**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including considering an effectiveness of a glue preparation of said rolls of material during said planned production period.

Art Unit: 3687

However, Ohno teaches the limitation further including considering an effectiveness of a glue preparation of said rolls of material during said planned production period (see, for example, column 25 lines 42 -56 and column 26 lines 28 – 37, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system considering an effectiveness of a glue preparation of said rolls of material during said planned production period, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 42**, Costanza, discloses a method further including providing a first shelf block remote from said material-processing machine in said depot, providing a second shelf block adjacent said material-processing machine and providing an inner shelf block located between said first shelf block and said second shelf block (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 43**, Costanza, discloses a method including, in a low storage application utilizing said first shelf block for storage of only unprepared rolls, utilizing said second shelf block for storage of prepared rolls and maintaining said inner shelf block empty except for passage of said rolls (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 44**, Costanza, discloses a method including, in one of a normal storage and a high storage application, utilizing said first shelf block for storage of only unprepared rolls, utilizing said second shelf block for storage of only prepared rolls and utilizing

Art Unit: 3687

said inner shelf block as a buffer for unprepared rolls and for prepared rolls (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 45**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including considering criteria of a type of said rolls of material needed in said production period to be examined and further including differentiating in said type of said rolls of material needed between many small productions and fewer large productions.

However, Ohno teaches the limitation further including considering criteria of a type of said rolls of material needed in said production period to be examined and further including differentiating in said type of said rolls of material needed between many small productions and fewer large productions (see, for example, column 26 lines 20 -27 and 59 - 67).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system considering criteria of a type of said rolls of material needed in said production period to be examined and further including differentiating in said type of said rolls of material needed between many small productions and fewer large productions, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 46**, Costanza, discloses a method further including reserving sufficient space in said depot for the return of used rolls to said depot when said production period includes said many small productions (see, for example, column 3 line 66 – column 4 line 49).

Art Unit: 3687

With respect to **claim 47**, Costanza, discloses a method further including storing said prepared rolls in a travel optimized manner when said production period includes said fewer large productions (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 48**, Costanza, discloses a method further including, in a second partial process, checking an occupancy of said depot and in a manner optimized for production, and determining a strategy for repositioning in said depot using criteria for a degree of storage use to be expected during said production period under examination (see, for example, column 3 line 66 – column 4 line 49), but does not explicitly teach the limitation wherein it is for prepared and unprepared rolls of material.

However, Ohno teaches the limitation wherein it is for prepared and unprepared rolls of material (see, for example, column 25 lines 42 -56 and column 26 lines 28 – 37, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system wherein it is for prepared and unprepared rolls of material, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 49**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing said material flow system with information regarding an actual stock of said rolls of material on hand.

Art Unit: 3687

However, Ohno teaches the limitation further including providing said material flow system with information regarding an actual stock of said rolls of material on hand (see, for example, Fig. 28, column 26 lines 59 – 67, column 27 lines 3 - 6).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing said material flow system with information regarding an actual stock of said rolls of material on hand, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 50**, Costanza, discloses a method further including determining a strategy for a production-oriented repositioning in said depot using criteria for an extent of depot occupancy during said production period to be examined (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 51**, Costanza, discloses a method further including providing roll changers in said material-processing machine and considering an extent of occupancy of said depot whenever, in low occupancy, storage of said prepared rolls is taking place in a path-optimized manner with respect to one of said roll changers to be severed and wherein, in high occupancy, storage of said prepared rolls is taking place chaotically in said depot acting together with active ones of said roll changers (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 52**, Costanza, discloses a method further including providing a first serving element remote from said material-processing machine and locating said first serving element between said first and third shelf blocks, and further including providing a second

Art Unit: 3687

serving element adjacent said material-processing machine and locating said second serving element between said second and said inner shelf blocks (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 53**, Costanza, discloses a method further including locating ones of said prepared rolls required for use within a short time in one of said second and said inner shelf blocks (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 54**, Costanza, discloses a method further including redepositing unprepared ones of said rolls of material for preparation of said rolls of materials in an access area of said second serving element (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 55**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit.

However, Ohno teaches the limitation further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit (see, for example, column 27 lines 28 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing a roll preparation circuit in said depot and processing said unprepared rolls in said roll preparation circuit, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Art Unit: 3687

With respect to **claim 56**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit.

However, Ohno teaches the limitation further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit (see, for example, column 27 lines 19 -39).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including providing a roll preparation circuit in said depot and removing unprepared rolls from one of said first shelf block and said inner shelf block, using one of said serving elements, and supplying said unprepared rolls to said roll preparation circuit, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 57**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block.

However, Ohno teaches the limitation further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block (see, for example, column 27 lines 19 -39).

Art Unit: 3687

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system further including placing said rolls of material, after passage through said roll preparation circuit, into intermediate storage in said inner shelf block, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 58**, Costanza, discloses a method further including storing said rolls of material in one of said first shelf block and said inner shelf block as a result of a storage distance from a first partial process (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 59**, Costanza, discloses a method further including delivering a prepared roll of said material from one of said first storage block and said inner storage block to a storage space in said second shelf block as a result of a storage demand from a partial process (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 60**, Costanza, discloses a method further including categorizing a degree of occupancy of said depot below 40% as low occupancy (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 61**, Costanza, discloses a method further including categorizing a degree of occupancy of said depot above 70% as high occupancy (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 62**, Costanza, discloses a method further including storing said criteria in exact and changeable definition (see, for example, column 3 line 66 – column 4 line 49).

Art Unit: 3687

With respect to **claim 63**, Costanza, discloses a method further including storing said criteria in a form of a changeable term of a linguistic variable of a fuzzy logic control (see, for example, column 23 lines 51 -61 and claim 1).

With respect to **claim 64**, Costanza, discloses a method further including providing one of a computing and a data processing unit in said material flow system and forwarding one of production-relevant data and use data regarding planned production of a production planning system to said one of said computing unit and said data processing unit (see, for example, figure 1 and column 7 lines 48- 67).

With respect to **claim 65**, Costanza, discloses a method further including determining a storage strategy and a deposit request for said unprepared rolls of material using said one of said computing unit and said data processing unit using prognostic use data for a pending production period and information regarding an actual stock of said rolls of material, and further including fixing a time for a production preparation of said rolls of material in a preparation circuit using a logical device in said material flow system and considering a limited shelf life of a glue preparation and a planned length of a production time (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 66**, Costanza, discloses all the above mentioned limitations but does not explicitly teach the limitation directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal in response to said request directly through said material flow system.

Art Unit: 3687

However, Ohno teaches the limitation further including directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal in response to said request directly through said material flow system (see, for example, column 26 lines 20 -27 and 59 - 67).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the method of Costanza, in accordance with the teachings of Ohno, in order to use material in material flow system directing a partial signal requesting rolls of material to said material flow system, registering said partial signal in said one of said computing unit and said data processing unit and determining said partial signal using existing data regarding depot occupancy for availability in said depot and ordering removal in response to said request directly through said material flow system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

With respect to **claim 67**, Costanza, discloses a method further including checking a partial request using said material flow system, using transmitted production-relevant data, for optimally positioning said prepared and unprepared rolls in accordance with planned production requirements, and further including determining a strategy for a production-oriented repositioning of said unprepared and prepared rolls in said depot (see, for example, column 3 line 66 – column 4 line 49).

Art Unit: 3687

With respect to **claim 68**, Costanza, discloses a method further including providing a logical device in said material supply system and using said logical device for performing said partial request (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 69**, Costanza, discloses a method further including providing storage spaces in said depot for storing said unprepared and prepared rolls of material, continuously checking an occupancy of said depot in respect to planned requirements using a predetermined criteria and positioning said unprepared and prepared rolls of material in said storage spaces in a production-optimized manner (see, for example, column 3 line 66 – column 4 line 49).

With respect to **claim 70**, Costanza, discloses a method further including determining said storage strategy using prognosis of use data and information regarding actual stock on hand (see, for example, column 3 line 66 – column 4 line 49).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD R. ULLAH MASUD whose telephone number is (571)270-5390. The examiner can normally be reached on MONDAY TO THURSDAY 9.00 AM TO 5.30 PM (EASTERN TIME).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW S. GART can be reached on (571)272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. U./
Examiner, Art Unit 3687

/Elaine Gort/
Primary Examiner, Art Unit 3687